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| PRE-APPEAL BRIEF REQUEST FOR REVIEW | | Docket Number (Optional) DEM1P008 | | | |
| <p>I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]</p> <p>on <u>April 24, 2008</u></p> <p>Signature <u>FILED VIA EFS</u></p> <p>Typed or printed name <u>FILED VIA EFS</u></p> | | Application Number 10/006,608 | Filed November 30, 2001 | | |
| | | First Named Inventor Michael Neal et al. | | | |
| | | Art Unit 3621 | Examiner Hewitt II, Calvin L. | | |
| <p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <table style="width: 100%; border: none;"><tr><td style="width: 50%; vertical-align: top; padding: 5px;"><p><input type="checkbox"/> applicant/inventor.</p><p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p><p><input checked="" type="checkbox"/> attorney or agent of record. Registration number <u>37,491</u></p><p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____</p></td><td style="width: 50%; vertical-align: top; padding: 5px;"><p><u>/Kang S. Lim/</u> Signature</p><p><u>Kang S. Lim</u> Typed or printed name</p><p><u>925-570-8198</u> Telephone number</p><p><u>April 24, 2008</u> Date</p></td></tr></table> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p> | | | | <p><input type="checkbox"/> applicant/inventor.</p> <p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p> <p><input checked="" type="checkbox"/> attorney or agent of record. Registration number <u>37,491</u></p> <p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____</p> | <p><u>/Kang S. Lim/</u> Signature</p> <p><u>Kang S. Lim</u> Typed or printed name</p> <p><u>925-570-8198</u> Telephone number</p> <p><u>April 24, 2008</u> Date</p> |
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| <p><input type="checkbox"/> *Total of _____ forms are submitted.</p> | | | | | |

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT

In re application of: NEAL et al.

Attorney Docket No.: DEM1P008

Application No.: 10/006,608

Examiner: HEWITT II, Calvin L.

Filed: November 30, 2001

Group: 3621

Title: SUBSET OPTIMIZATION SYSTEM

Confirmation No: 1143

April 24, 2008

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop: AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Appellants hereby request review of the decision of the primary examiner mailed December 27, 2007. The Pre-Appeal Panel is thanked for their review of the application.

Claims 1, 3-7, 9-14 and 16-28 are currently pending. The present application has been rejected under 35 U.S.C. 103(a) as being unpatentable over Ouimet et al. (US 6,094,641), in view of Hartman et al. (US 5,987,425), and further in view of Delurgio et al. (US 6,553,352).

Additionally, Claims 1, 3-7, 9-14 and 16-28 have been rejected under 35 U.S.C. 101 and 35 U.S.C. 112.

Appellants respectfully request a pre-appeal brief review of the present application in light of the arguments raised herein. For the sake of brevity, Appellants respectfully direct the review panel to, and incorporates by reference, Appellants' October 4, 2007 response, for a complete listing of claims, as well as additional arguments for allowability that were unable to be included in this Pre-Appeal Brief for lack of adequate space.

Regarding the rejection under 35 USC 101, Appellants assert that, contrary to the Examiner's beliefs, that base Claims 1 and 23 disclose "functional descriptive material" as they are "data structures and computer programs which impart functionality when employed as a computer component." (MPEP 2106.01). Regarding this kind of functional descriptive material, "a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory." (MPEP 2106.01 subsection I). Thus, "[w]hen a computer program is recited in conjunction with a physical structure, such as a computer memory, USPTO personnel should treat the claim as a product claim." (MPEP 2106.01 subsection I).

Moreover, regarding claims 14, 21, 23 and 24, Appellants assert that the claims as currently stated do not simply disclose an algorithm since there is a resulting, real-world effect of the process. The claims include the 'setting of prices', and the 'reporting of optimized pricing for price setting'. Setting prices, as stated in all base claims 1, 14, 21, 23 and 24, "establishes the amount of money consumers pay for each product of the subset of product." Optimal price setting is integral to the success of businesses, thereby fulfilling usefulness. Prices actually change for consumers, thus there is a tangible element to the price setting. Likewise, the price setting is non-arbitrary, as it is designed to maximize profit or another objective. Therefore, price setting is also concrete. Thus, price setting, or the reporting of, clearly produces a concrete, tangible and useful result.

Regarding the rejection under 35 USC 112, Appellants assert that Claim 1, 3-7, 9-13, 26, 27 and 28, as currently stated, includes an apparatus claim with the necessary structural components; that being the database, modeling engine, subset generator, optimizer and interface.

Regarding the Examiner's rejection of Claims 1, 3-7, 9-13, 26 and 28 under 35 U.S.C. 103(a), Appellants assert that Ouimet '641 does not appear to have the "subset generator" for designating a subset of products as disclosed in Claim 1.

As Appellants have previously contended, Ouimet '641 appears to **incorporate "psychological factors" into a demand model** for pricing (column 1, lines 54-56) (emphasis added). **Ouimet does not teach or suggest generating subsets.** In fact, it appears that what is disclosed in Ouimet **necessarily applies to all products** because a tuning of the demand model, as is disclosed in Ouimet, results in an evenhanded application to all products in order to produce meaningful results. Thus, Ouimet appears to tune a demand model which is very different from the present invention's subset designation for optimization.

Regarding the Examiner's rejection of Claims 14 and 16-27 under 35 U.S.C. 103(a), Appellants reiterate their concerns with Ouimet '641 as discussed above. Additionally, Appellants believe that none of the cited references disclose "designating a subset of products of the plurality of products" through "determining which N products have the largest impact on optimization of prices by solving an integer problem" in the manner claimed in any of the base Claims 1, 14, 21-24, 26 and 27.

The Examiner stated that "[r]egarding, the selection of a subset of products, Hartman et al. teach product subsets being determined by 'experienced retailers' who have a 'good feel for the price sensitivity of items' in a product line ('425, column 5, lines 48-64)." Moreover, Examiner stated that "it would have been obvious to one of the ordinary skill to automate the subset selection of Hartman et al. using a well known computer algorithm such as integer programming." Thus, the Examiner appears to be suggesting that the subset selection of Hartman is similar to the process of subset selection of the present invention.

Appellants assert, however, that the "designating a subset of products of the plurality of products, wherein the number of products in the subset of products is less than the number of products in the plurality of products, the designating a subset of products comprising: generating a

set of candidate products of the plurality of products; designating a number N; determining which N products of the candidate products have the largest impact on optimization of prices by solving an integer problem; and selecting no more than N products of the plurality of products to form the subset of products using the determination of which N products have the largest impact on optimization” is very different than an “experienced retailer” selecting products based on a ‘hunch.’

Hartman does not teach, suggest, imply, or even contemplate the sophisticated system of subset designation disclosed in the present invention.

Furthermore, with regard to all pending Claims 1, 3-7, 9-14, 16-28, Appellants reiterate their belief that Hartman ‘425 is not combinable as a matter of art with Ouimet ‘641. Appellants believe that the methodology of **Hartman is simply incompatible with Ouimet**.

The method disclosed in Ouimet appears to be a system for further tuning a demand model by taking into account “psychological effects”. (column 3, lines 1-3). The “modified demand model from the Tuning Process [is utilized] to determine **the price** for each item that will **maximize profits**.” (Column 5, lines 45-50) (Emphasis added). As such, Ouimet appears to necessitate computing **specific, singular output values: the price for each item that maximizes profits**.

In contrast, Hartman teaches away from Ouimet by disclosing a method for developing “**variable margin pricing** of products” rather than a specific value (column 1, lines 6-10). In Hartman a “**radically different approach** has been taken . . . where the basic philosophy is that **retail prices only need to be close to a vague undefined target**.” (Column 2, lines 56-60) (Emphasis added). Hartman **self proclaims its “radical[]” distinctiveness** in no uncertain terms. (Emphasis added).

As such, Hartman’s **methodology appears to be at complete odds to the method of Ouimet**. With such a fundamental difference of methodology, it is clear that the methods disclosed by Hartman, and that of Ouimet, are incompatible methods and thus at the least their combinability is non-obvious.

In sum, Appellants believe that all pending Claims 1, 3-7, 9-14 and 16-28 are allowable over the cited art and are also in allowable form and respectfully request a Notice of Allowance for this application from the Pre-Appeal Panel. The commissioner has been authorized to charge all fees associated with this filing to our credit card via EFS. However, the commissioner is authorized to charge any additional fees that may be due to our Deposit Account No. 50-2766 (Order No. DEMIP008). Should the Pre-Appeal Panel believe that a telephone conference would expedite the prosecution of this application; the undersigned can be reached at telephone number 925-570-8198.

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Respectfully submitted,

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